

AMENDED PATENT CLAIMS  
(Annex to IPER)

- 5 1. Process for preparing a biological material for  
examination with a microscope,  
whereby a transparent film (3) for smoothing out  
irregularities on the surface of the biological material  
(2) in order to improve visual characteristics of the  
10 biological material (2) is applied onto a surface of the  
biological material (2), characterised in that the film (3)  
is a laser light absorbing film.
- 15 2. Process according to Claim 1,  
characterised in that the film (3) is sprayed onto the  
surface of the biological material (2).
- 20 3. Process according to Claim 1,  
characterised in that the film (3) is brushed onto the  
surface of the biological material (2).
- 25 4. Process according to Claim 1,  
characterised in that the film (3) is applied onto the  
surface of the biological material (2) by immersing the  
biological material (2) in an immersion bath.
5. Process according to any one of the preceding claims,  
characterised in that the film (3) is not toxic.
- 30 6. Process according to any one of the preceding claims,  
characterised in that the film (3) is inert and when  
applied onto the biological material (2) the biological

material (2) is not disadvantageously affected chemically or biologically.

7. Process in accordance with any one of the preceding  
5 claims,  
characterised in that the film (3) contains a transparent  
preparation, mixture and/or pure substance.

8. Process according to Claim 7,  
10 characterised in that the preparation, mixture or pure  
substance (2) is a preparation, mixture and/or pure  
substance selected from the group of short- or long-chain  
and/or totally or partly unsaturated acids and/or bases,  
poly-amides, -alcohols, -carbonates or silicones or  
15 mixtures thereof.

9. Process according to any one of the preceding claims,  
characterised in that the film (3) when applied onto the  
surface of the biological material (2) has a character  
20 promoting the visual characteristics of the biological  
material (2) with regard to balance of the refractive  
index, suppression of undesirable light scattering and/or  
improved visualization of the biological specimen.

25 10. Process according to any one of the preceding claims,  
characterised in that the film (3) is a UV laser light  
absorbing film.

11. Process according to any one of the preceding claims,  
30 characterised in that the film has a preparation, mixture  
and/or pure substance soluble in an aqueous solution.

12. Process according to any one of the preceding claims,

characterised in that the film (3) contains at least one substance for systematically affecting the visual characteristics of the biological material (2) when radiated with light.

5

13. Process according to Claim 12, characterised in that the film (3) contains at least one substance preserving the RNA of the biological material (2) when radiated with light.

10

14. Process according to Claim 12 or 13, characterised in that the film (3) contains at least one substance systematically affecting the fluorescence visual characteristics of the biological material (2).

15

15. Process according to Claim 14, characterised in that the film (3) contains a fluorophor for achieving a fluorescence with a certain light wavelength.

20

16. Process according to Claim 14 or 15, characterised in that the film (3) contains at least one substance, which prevents fluorescence with a certain light wavelength.

25

17. Process according to Claim 16, characterised in that the substance is selected for prevention of fluorescence in such a manner that it prevents the fluorescence with the certain light wavelength by quenching in the sense of a Stern Vollmer analysis substantially more effectively with regard to bimolecular quenching than its self de-excitation permits with inherent uni-molecular kinetics.

30

18. Process according to any one of the preceding claims,  
characterised in that the film (3) has a preparation,  
mixture and/or pure substance dissolved in a solvent, which  
5 is carried on the surface of the biological material (2).

19. Process according to Claim 18,  
characterised in that the solvent, in which the  
preparation, mixture and/or pure substance is dissolved, is  
10 a solvent selected from the group of short-chain alcohols,  
ketones, esters, benzenes or water.

20. Process according to any one of the preceding claims,  
characterised in that the film (3) is constituted in such a  
15 manner that after solidification in air it facilitates  
cutting and/or a catapulting of the film (3) as well as of  
the biological material (2) present underneath with a laser  
beam, in particular a UV laser beam.

20 21. Arrangement with carrier means (1) and a biological  
material (2) present on the carrier means (1), wherein a  
transparent film (3) is applied onto the surface of the  
biological material (2) for smoothing out irregularities in  
the surface of the biological material (2) in order to  
25 improve the visual characteristics of the biological  
material (2) for examination with a microscope,  
characterised in that the film (3) is a laser light  
absorbing film.

30 22. Process according to Claim 21,  
characterised in that the biological material (2) is a  
biological specimen prepared according to any one of Claims  
1-20.